This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method ~~for transforming a plant with at least one transgene,~~ comprising the steps of:

a. culturing an explant of a dicotyledon ~~plant~~ in nutritive medium to produce a cultured explant; and

b. electroporating the cultured explant and at least one transgene with a pulse length of at least about 50 milliseconds to produce a transformed explant;

wherein the cells of the explant are not subjected to exogenous enzymatic digestion or partial exogenous enzymatic digestion of their cell walls and the transgene is stably integrated into a chromosome of a cell of the transformed explant.

2. (original) The method of claim 1, wherein the pulse length is from about 90 to about 300 milliseconds.

3. (original) The method of claim 1, wherein the pulse length is from about 90 to about 250 milliseconds.

4. (original) The method of claim 1, wherein the pulse length is from about 90 to about 200 milliseconds.

5. (original) The method of claim 1, wherein the pulse length is from about 90 to about 150 milliseconds.

6. (original) The method of claim 1, wherein at least two transgenes are electroporated in step b.

7. (previously presented) The method of claim 1, wherein a nucleic acid encoding a marker is also electroporated in step b.

8. (previously presented) The method of claim 6, wherein a nucleic acid encoding a marker that is on a separate DNA molecule than the at least one transgene is also electroporated in step b.

9. (currently amended) A method of producing a transgenic plant comprising the steps of:

a. culturing an explant of a dicotyledon ~~plant~~ in nutritive medium to produce a cultured explant;

b. electroporating the cultured explant and at least one transgene with a pulse length of from about 50 to about 500 milliseconds to produce a transformed explant, wherein the cells of the explant are not subjected to exogenous enzymatic digestion or partial exogenous enzymatic digestion of their cell walls and the transgene is stably integrated into a chromosome of a cell of the transformed explant; and

c. regenerating the transgenic plant from said transformed explant.

10. (original) The method of claim 9, wherein the pulse length is from about 90 to about 300 milliseconds.

11. (original) The method of claim 9, wherein the pulse length is from about 90 to about 250 milliseconds.

12. (original) The method of claim 9, wherein the pulse length is from about 90 to about 200 milliseconds.

13. (original) The method of claim 9, wherein the pulse length is from about 90 to about 150 milliseconds.

14. (original) The method of claim 9, wherein at least two transgenes are electroporated in step b.

15. (previously presented) The method of claim 9, wherein a nucleic acid encoding a marker is also electroporated in step b.

16. (previously presented) The method of claim 9, wherein a nucleic acid encoding a marker that is on a separate DNA molecule than the at least one transgene is also electroporated in step b.

17. (previously presented) The method of claim 16, wherein the transgenic plant lacks the nucleic acid encoding a marker.

18. (previously presented) The method of claim 16, wherein the nucleic acid encoding a marker encodes isopentenyl transferase.

19. (canceled).

20. (currently amended) The method of ~~claim 19~~ claim 1 wherein the plant is selected from the group consisting of chrysanthemum, petunia, and rose.

21-27. (canceled)

28. (previously presented) The method of claim 1 wherein said plant is a plant of the genus Petunia.

29. (previously presented) The method of claim 1 wherein said plant is a plant of the genus Rosa.

30. (previously presented) The method of Claim 6 wherein said transgenes are other than a selectable marker.

31. (previously presented) The method of Claim 6 wherein said transgenes are electroporated along with a nucleic acid encoding a selectable marker.

32. (previously presented) The method of claim 31 wherein said selectable marker and said transgene are encoded on a single nucleic acid molecule.

33. (previously presented) The method of claim 31 wherein said selectable marker and said transgene are encoded on separate nucleic acid molecules.

34. (previously presented) The method of claim 31 wherein said selectable marker is NPTII.

35-43. (canceled)